Interconnection Rules Working Group Process

99-DIST-GEN(2)

California Energy Commission
January 2000

Interconnection Rules
Working Group Process Adopted by Siting Committee On December 16, 1999

General Principles to Guide Work

1. Rules, protocols, and processes should be clear and transparent.

2. Rules should be technology neutral, except where differential requirements can be fully justified by safety or other legitimate concerns.

3. Rules should apply to all project sponsors on a non-discriminatory basis.

4. Rules should be uniform throughout California, and nationwide if possible.

5. Utility distribution companies should be fairly compensated (and customers should be fairly charged) for distribution services that support distributed generation installations and customers.

Schedule (as of 1/10/00)

January 4-5	Kickoff working group meetings.
January 19	Non-Technical Working Group Meeting (Strawman Discussion)
February 1	Technical Working Group Meeting (Strawman Discussion)
February 16	Energy Commission Staff Workshop - Evaluate progress of working groups activity
Late March	Working groups to formalize recommendations, noting minority opinions, and provide to Energy Commission staff.
Mid-April	Energy Commission staff to issue workshop report.
Late April	Siting Committee to hold a workshop/hearing addressing Energy Commission staff report.
Mid-May	Siting Committee to release draft CPUC recommendation for review.
Early June	Parties to file comments with the Energy Commission on draft report.
Late June	Energy Commission to adopt report and transmit to the CPUC.

Rules for Participation and Voting in Working Groups

1. The work of the groups shall be facilitated by Commission staff and/or consultants hired by the Commission.

2. A quorum consists of a minimum of 50 percent of the total qualified voting members.

3. Meeting attendees may speak to the group only when recognized by the facilitator. Side discussions will not be allowed. Sarcasm is not permitted and subject to censure.

4. The facilitator is empowered to guide discussion, terminate debate, and to keep the process moving.

5. Final recommendations will be characterized using a two-thirds vote of the qualified voting membership. The final report will include a list of each entity who voted and any submitted minority reports.

6. There will be a single vote for each entity.

7. To maintain voting membership, an entity must have representatives at two of the last three meetings. The three meetings will include the current or most recent meeting.

8. To accommodate parties' desires, a majority of parties in attendance is required to approve modification of meeting dates and locations, or other minor issues.

9. A minimum of five calendar days is required for meeting notifications, which include meeting location, meeting dates, and how to contact the host. Notification will consist of either posting the meeting announcement to the Commission web page, mailing a notice to parties on the service list, or sending a notice by electronic mail.

10. When voting, the qualified members may vote "Yes," "No," or "Abstain." Providing comments by reason is optional. A written minority report or reasons for any vote may be included with the majority report.

Interconnection Standards
Non-Technical Working Group

Objective: The non-technical interconnection working group will develop the non-technical procedures and contractual materials needed to establish an interconnection between a distributed generator and a utility. The group will also investigate how interconnection rules ultimately selected by the CPUC might apply to entities not subject to CPUC jurisdiction and address the timing for implementing rules developed in this proceeding.

Products: 1) A document with recommendations about non-IOU compliance.
2) A document detailing the Uniform Application Process (interconnection agreements, interconnection studies, application requirements, need for benefits analysis, interconnection schedule, etc.
3) A document detailing recommendations to the CPUC and the utilities regarding implementing rules once approved by the CPUC.

Issue	Notes
1. Role of municipalities and irrigation districts in development and compliance with interconnection standards	
2. Differences and similarities of interconnection requirements for IOUs and non-IOUs	
3. Applicability of new standards to existing installations	
4. ISO jurisdictional issues	Need to agree on what limits should apply to a DG installation (i.e., when does ISO need to be involved, metering and communications requirements
5. Applying IEEE standards to the California process	
6. How local conditions can be accommodated in any interim and permanent statewide standards	Local codes, covenants, restrictions, insurance, indemnity, etc.
7. Responsibility for testing and periodic retesting	Also need to consider the feasibility of self-certification or independent testing, enforcement of requirements
8. Coordinating work with IEEE effort	
9. Training for personnel of UDCs, air quality districts, and building inspectors from local governments, installers, owners	All entities directly related to the interconnection process
10. Lead time between adoption and effective date of new requirements	
11. Standards Enforcement	Implementation, dispute resolution
12. Interconnection Study Fees	Timeline, processing/engineering fees, size and technology guidelines
13. Development of standard agreements	Contracts
14. Whether line extension rules impact interconnection rules	

15. Additional fees	Testing fees as an example

Interconnection Standards
Technical Working Group

Objective: The interconnection technical working group will develop the specific uniform interconnection requirements to connect distributed generators to the utility systems.

Products: A document identifying the specific steps needed to connect to the utility grid. The report will also include revised Rule 21 tariff language.

Recurring Themes and Issues to Consider:

Low-cost interconnections
Predictable costs and timetable
Streamlined requirements
Plug-and-Play equipment
Consistency, Uniformity
Fairness
Cookbook approach
Safety and Reliability
Require what is necessary to maintain safety and reliability (but no more)
Smaller system size (under 100kW or 200kW or 500kWor 1MW)
Don't forget mid-sized systems (1-10MW)
Power export impacts level of interconnection requirements
Don't bite off more than can be chewed.
Keep in close coordination with national standards efforts
Need alternate plan (Plan B) to facilitate systems that do not fit the mold of the standard
Certification of equipment
There are limits to interconnection given existing distribution system limitations

Measures of Success:

Uniform requirements that are applicable statewide and consistent nationally
Increase in number of DG systems installed
No utility system degradation as a result of the requirement
Good communication with stakeholders as to the necessity of the requirements
DG seen as a potential asset rather than a potential liability
Reduced time in processing project

Strawman Assignments

Technical Working Group

1) Document of municipalities and irrigation districts about recommended compliance with a statewide standard.

(Group Leader - Scott Blaising, CMUA)

2) Uniform Application Process Documentation
-standard agreements
-required forms, studies

(Group Leader - Tom Dossey, SCE)

3) Implementation Schedule
-How and when the statewide standard is implemented.

(On Hold)

Non-Technical Working Group

1) Draft Rule 21 Tariff Language and Interconnection Protocols Manual

(Group Leader - Bill Brooks, Endecon Engineering)